

WHAT IS CLAIMED IS:

1. A game machine for executing a predetermined game in response to a player's operation, comprising:

display means for displaying a game screen;

operation switches operated by the player;

5 operation pattern data storage means for storing operation pattern data including operation timing data defining an operation timing of said operation switches to be operated by the player, and operation type data defining which type of said operation switches is to be operated with the operation timing;

10 display control means for having said display means sequentially displayed, based on said operation pattern data, information about the operation timings and the types of said operation switches to be operated by the player;

evaluation means for successively evaluating, with the
15 progress of the game, correlation between the operation timings and types of said operation switches operated by the player responding to the information displayed on said display means, and the operation timings and types defined by said operation pattern data; and

20 difficulty level change means for dynamically changing a difficulty level of a game operation input in accordance with the evaluation made by said evaluation means for a predetermined period.

2. The game machine according to claim 1, further comprising:

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music data storage means for storing music data;
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music data reproduction means for reproducing said
5 music data; and

presentation effect generation means for generating a predetermined presentation effect responding to how said operation switches are operated, wherein

said operation pattern data storage means previously
10 stores, corresponding to said music data, the operation pattern
data defining which type of said operation switches is to be
operated by the player with what timing, and

said display control means has said display means sequentially displayed the information about the operation timings and the types of said operation switches to be operated by the player responding to said music data reproduced by said music data reproduction means.

3. The game machine according to claim 1, wherein

said difficulty level change means skips said operation
type data or cancels the skip, partially or entirely, and controls
said display control means to perform display control and said
5 evaluation means to perform evaluation.

4. The game machine according to claim 1, wherein

said difficulty level change means skips said operation type data or cancels the skip, partially or entirely, and controls said evaluation means to perform evaluation.

5. The game machine according to claim 1, wherein said difficulty level change means changes said operation type data in said operation pattern data or cancels the change, partially or entirely, and controls said display control means to perform display control and said evaluation means to perform evaluation.

6. The game machine according to claim 1, wherein said difficulty level change means controls said display control means to have said display means displayed said operation timings and the types defined by said operation pattern data in a different tempo.

7. The game machine according to claim 3, wherein said difficulty level change means skips said operation type data responding to said evaluation being poor, controls said display control means to have said display means performed display, and controls said evaluation means to perform evaluation only in terms of the correlation between the operation timings of said operation switches operated by the player and the operation timings defined by said operation pattern data.

8. The game machine according to claim 5, wherein
responding to said evaluation being poor, said
difficulty level change means changes said operation type data
defining a specific type of said operation switches to data of
5 any other type of the operation switches easier in operation,
controls said display control means to have said display means
performed display, and controls said evaluation means to evaluate
the correlation between the operation timings and the types of
said operation switches operated by the player and the operation
10 timings defined by said operation pattern data and the types of
the changed operation switches.

9. The game machine according to claim 1, wherein
said operation type data defines that a plurality of
types of said operation switches are operated simultaneously, and
responding to said evaluation being poor, said
5 difficulty level change means skips the data relating at least
to one type of said operation switches out of the plurality of
types of said operation switches to be operated simultaneously,
and controls said display control means to perform display and
said evaluation means to perform evaluation.

10. The game machine according to claim 2, wherein
said presentation effect generation means always
generates the presentation effect corresponding to the types of

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said operation switches defined by said operation pattern data
5 irrelevant to the control by said difficulty level change means.

11. The game machine according to claim 1, wherein
when the operation timings and types of said operation
switches operated by the player coincide with the operation
timings and types defined by said operation pattern data, said
5 evaluation means increases a game score, and differs the increase
of the game score according to the difficulty level.

12. The game machine according to claim 1, wherein
said evaluation means evaluates a coincidence between
the operation timings defined by said operation pattern data and
the operation timings of said operation switches operated by the
5 player based on a predetermined allowable range extending from
the operation timings defined by said operation pattern data.

13. The game machine according to claim 12, wherein
said allowable range is differed based on the
difficulty level.

14. A program for controlling a game executed in a game
machine, comprising:

a step of reading predetermined operation pattern data
including operation timing data defining an operation timing of

5 operation switches to be operated by a player, and operation type data defining which type of the operation switches is to be operated with the operation timing;

a step of having display means of the game machine sequentially displayed, based on said operation pattern data,
10 information about the operation timings and the types of said operation switches to be operated by the player;

a step of successively evaluating, with the progress of the game, correlation between the operation timings and types of said operation switches operated by the player responding to
15 the information displayed on said display means, and the operation timings and types defined by said operation pattern data; and

a step of dynamically changing a difficulty level of a game operation input in accordance with the evaluation made by said evaluation means for a predetermined period.

15. A program of a music game executed by a game machine, comprising:

a step of reading predetermined music data;

a step of reproducing said music data;

5 a step of generating a predetermined presentation effect responding to a player's operation of operation switches;

a step of reading predetermined operation pattern data including, corresponding to said music data, operation timing data defining an operation timing of operation switches to be

10 operated by the player, and operation type data defining which
type of the operation switches is to be operated with the operation
timing;

a step of having display means of the game machine
sequentially displayed, based on said operation pattern data,
15 information about the operation timings and the types of said
operation switches to be operated by the player corresponding to
reproduction of said music data;

a step of successively evaluating, with the progress
of the game, correlation between the operation timings and types
20 of said operation switches operated by the player responding to
the information displayed on said display means, and the operation
timings and types defined by said operation pattern data; and

a step of dynamically changing a difficulty level of
a game operation input in accordance with the evaluation made by
25 said evaluation means for a predetermined period.

16. The program according to claim 14, wherein
in response to an instruction made in said changing step,
said operation type data is skipped or canceled the skip,
partially or entirely, and said displaying step performs display
5 control and said evaluating step performs evaluation.

17. The program according to claim 14, wherein
in response to an instruction made in said changing step,

said evaluating step evaluates said operation type data which is skipped or skipped and cleared partially or entirely.

18. The program according to claim 14, wherein
in response to an instruction made in said changing step,
said operation type data in said operation pattern data is changed
or canceled the change, partially or entirely, and said displaying
5 step performs display control and said evaluating step performs
evaluation.

19. The program according to claim 14, wherein
in response to an instruction made in said changing step,
said displaying step has said display means displayed said
operation timings and the types defined by said operation pattern
5 data in a different tempo.

20. The program according to claim 16, wherein
in response to an instruction made in said changing step
corresponding to said evaluation being poor, said displaying step
skips said operation type data and has said display control means
5 performed display, and said evaluating step evaluates only in
terms of the correlation between the operation timings of said
operation switches operated by the player and the operation
timings defined by said operation pattern data.

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21. The program according to claim 18, wherein
in response to an instruction made in said changing step
corresponding to said evaluation being poor, said displaying step
changes said operation type data defining a specific type of the
5 operation switches to data of any other type of the operation
switches easier in operation and has said display control means
performed display, and said evaluating step evaluates the
correlation between the operation timings and the types of said
operation switches operated by the player and the operation
10 timings defined by said operation pattern data and the types of
the changed operation switches.

22. The program according to claim 14, wherein
said operation type data defines that a plurality of
types of said operation switches are operated simultaneously, and
in response to an instruction made in said changing step
5 corresponding to said evaluation being poor, the data relating
at least to one type of said operation switches out of the plurality
of types of said operation switches to be operated simultaneously
is skipped, said displaying step performs display, and said
evaluating step performs evaluation.

23. The program according to claim 15, wherein
said generating step always generates the presentation
effect corresponding to the types of said operation switches

defined by said operation pattern data irrelevant the instruction
5 made in said changing step.

24. The program according to claim 14,
further comprising a step of, when the operation
timings and types of said operation switches operated by the
player coincide with the operation timings and types defined by
5 said operation pattern data, increasing a game score and differing
the increase of the game score according to the difficulty level.

25. The program according to claim 14, wherein
said evaluating step evaluates a coincidence between
the operation timings defined by said operation pattern data and
the operation timings of said operation switches operated by the
5 player based on a predetermined allowable range extending from
the operation timings defined by said operation pattern data.

26. The program according to claim 25, wherein
said allowable range is differed based on the
difficulty level.